

Chemistry plays a pivotal role in the strength of the U.S. economy and the advancement of humankind. Chemists' achievements include life-saving pharmaceuticals, advanced energy solutions, improved agricultural productivity, and novel materials used in products from clothing to electronic devices. The many sectors reliant on the U.S. chemical economy account for about 25% of the U.S. GDP and support 4.1 million U.S. jobs. However, a new and evolving chemistry landscape requires changes with regard to funding, training, and a focus on integrating sustainability into manufacturing, product usage, and product disposal.

This report identifies strategies and options for research investments that will support U.S. leadership while considering environmental sustainability and developing a diverse chemical economy workforce with equitable opportunities for all chemistry talent. The report recommends that funding agencies and philanthropic organizations who support the chemical sciences fund as large a breadth of fundamental research projects as possible. Chemical industry and their partners at universities, scientific research institutions, and national laboratories should align the objectives of fundamental research to directly assist with new practices toward environmental stewardship, sustainability, and clean energy. Additionally, the report recommends that funding agencies make substantial investment toward education research to enable innovative ways of teaching about emerging concepts, tools and technologies.

National Academies of Sciences, Engineering, and Medicine. 2022. The Importance of Chemical Research to the U.S. Economy. Washington, DC: The National Academies Press.

To obtain [research chemicals](#) and controlled substances from the NIDA DSP, all research investigators will need to prepare a Request Package. A Request Package should include the following items:

1. A cover letter including:
 1. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
 - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express (FedEx) (i.e. street address, building name or number, room number, city and state) - This address should coincide with the address on the DEA order form.
 - For radio-labeled drugs or chemical substances, indicate the address to which such materials will be shipped. In case the shipping address is different from the researcher's address, a current copy of the radioactive materials license must be submitted.
 2. If applicable, NIH grant number of project and name and contact information of project's NIDA/NIH Program Officer. If a non-grantee, no information on Program Officer and grant number is required.
 3. Name(s) and quantity of compounds or other substances being requested,
 - The total radioactivity (preferred units of measurement, mg per vial, etc.)
 - If multiple studies/tasks are planned, combine projected needs into a single order rather than placing several separate requests in a short time interval. The request should generally be limited to four items or drugs/compounds per order to avoid delay.
 - Avoid drug abbreviations, and include specifications such as (+), (-), (dl), base, or salt, as appropriate. Please visit the [NIDA Drug Supply Catalog \(PDF, 11.6MB\)](#) (this document is not fully accessible, for help viewing this content, please contact [Rik Kline](#) at 301-827-5243), for drug supply information.
2. The Research Investigator's curriculum vitae (CV).

3. A detailed research protocol clearly indicating:

1. The specific aims and goals of proposed study (preferably the study abstract)
2. The number of experiments and experimental subjects
3. The dosages or concentration of drugs
 - Calculate required amount of drugs or chemical substances for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/tasks.
4. Justification of quantities of drug(s) requested. If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief statement of progress along with references to resulting publications.

4. Statement of commitment that NIDA will be acknowledged in research publications using the NIDA [Drug Supply Program](#).

5. A completed [DEA Order Form-222](#) for Schedule I-II controlled substances.

- DEA Form-222 is not necessary for drugs in Schedules III-V, but a valid registration for the appropriate schedule is required.
- Under the third column of DEA Form-222 (Size of Package), list quantities as bulk weight. Radio-labeled compounds must be listed by weight and NOT by units of activity.

6. A copy of current DEA registration, [Form DEA-223](#) for controlled substances.

- It is the Research Investigator's responsibility to keep his/her registration current and to verify the drug code for requested drug.
- Investigators who request a Schedule I drug and/or Etorphine HCl or Diprenorphine must provide DEA documentation under which the requested drug is covered under their current DEA registration.
- Avoid drug abbreviations, and include specifications such as (+), (-), (dl), base, or salt, as appropriate.

7. For radioactive compounds, a copy of Nuclear Regulatory Commission license. For more information, please visit the [Nuclear Regulatory Commission licensing website](#).

8. For clinical research projects involving human subjects

1. Investigational New Drug (IND) number and a copy of approved IND letter from the FDA. For more information, please visit the [FDA IND Application website](#).
2. A copy of your Institutional Review Board (IRB) approval letter ,
3. A copy of your Data Safety and Monitoring Plan,
4. Proof of registration with clinicaltrials.gov (NCT #)
5. A copy of the study consent form(s)

9. For basic (non-human) research projects

1. A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised (if applicable). For more information, please visit the [Animal Care & Use Committee Animal Study Proposal website](#).

10. For ongoing research projects (This includes research previously supported by the NIH prior to request)

1. Reference information¹ pertaining the previous protocol / FDA approval to the previous protocol
2. A brief statement of progress (500 words or less)
3. A list of any relevant publications.

11. Billing Information for Shipping Costs:

1. US investigators should provide their FedEx account number to [bill shipping](#) charges,

2. International requests for controlled compounds should provide their United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges. For non-controlled compounds the investigator should provide their FedEx account number.

12. For Foreign Investigators, please submit the Import Permit (preferably in English) issued by an appropriate agency of your government if the request is for an internationally controlled drug substance. The name of the supplier on the import permit must be listed as follows:

Research Triangle Institute
Kenneth S. Rehder Ph.D.
Hermann Building , East Institute Drive
P.O. Box 12194
Research Triangle Park, NC 27709, USA

- The import permit should be accompanied by a signed statement from the investigator to the effect that the drug will be used solely for the purpose of research and will not be re-exported. The import permit must contain a clear address and individual name to which the requested drug is to be delivered (not a post office box number). Shipment should be indicated on the import permit as Air Freight to this individual. Specify the appropriate port for customs clearance purposes and provide the name and address of the Customs Clearance Agent, if one is used.
- Please obtain the longest possible expiration date on import permits.
- Foreign investigators requesting drugs or other substances that are not very stable should be certain to make advance arrangements that would allow these drugs or other substances to be released to them expeditiously. This is particularly relevant when dealing with radioactive materials with high specific activity (>1.0 Ci/mmol). These compounds are shipped as solutions in ice and will not stay cold for more than 48 hours; they must be retrieved and put in cold storage immediately to prevent decomposition.
- Foreign investigators should also be aware that compounds are shipped with a listed value for insurance purposes. Since this may cause problems with customs officials, investigators should determine in advance what steps should be taken to avoid these complications. Often an official statement that the compounds are for research only and have no commercial value is sufficient.

Helpful Notes:

Failure to comply with aforesaid guidelines may delay the processing of your request.

NOTE 1: ETORPHINE AND DIPRENORPHINE - Request for either of these two compounds should be made on separate order forms when ordering additional compounds at the same time. Etorphine hydrochloride and diprenorphine (free base or hydrochloride) are Schedule II drugs, however etorphine free base is a Schedule I drug. Therefore, etorphine free base should be ordered using DEA Form-222 as is appropriate for all Schedule I drugs.

NOTE 2: CARFENTANIL, ETORPHINE AND DIPRENORPHINE – The DEA registration of a research investigator requesting these compounds must show the proper registration for such compounds.